Amendments to the Specification:

Please replace the paragraph starting on page 4, line 18, with the following amended paragraph:

FIGS. 4A-4C ~~illustrates~~ illustrate how the antenna permits ultra-wideband operation exhibiting constant aperture characteristics for both transmit and receive functions. In a constant aperture antenna, antenna power received/delivered remains constant with frequency. Such antennas undergo a gain increase with the square of frequency (an increase of 20 dB per decade).

Please replace the paragraph starting on page 5, line 1, with the following amended paragraph:

FIGS. ~~4A~~ 4A- 4C are three-dimensional radiation patterns generated at low frequency (2.5 G Hz), FIG. 4A; mid frequency (5.5 G Hz), FIG. 4B; and high frequency (7.5 G Hz), FIG. 4C . These patterns show that antenna gain increases with frequency and that beam-width decreases with frequency.